### PHYSICAL FEATURES - FEATURE 241 - CROSSDRAINS

| FEATURE 241 - CROSSDRAINS  |                                       |    |                                |     |     |  |  |  |
|--|---------------------------------------|----|--------------------------------|-----|-----|--|--|--|
| Roadway Side Offsets LRS Package Feature Type Interlocking Secured |                                       |    |                                |     |     |  |  |  |
| C/R/L  | No                                    | No | Point                          | Yes | Yes |  |  |  |
| Responsible Party 1  | Responsible Party for Data Collection |    | District Office of Maintenance |     |     |  |  |  |
|  |                                       |    |                                |     |     |  |  |  |

**Definition/Background:** Describes box culverts with sum total of openings are less than 20 feet and crossdrains. Both are located across roadways for the purpose of draining excess water. If these characteristics are part of a storm sewer system, do not inventory them because they will be captured under Feature 242.

**NOTE:** If the above characteristics are located at a rest area, ramp, or other applicable sub-section, they are to be inventoried against the applicable sub-section number. They are normally inventoried using the center point of the right side for the milepoint data. Exceptions are when the crossdrains are on the left side only of a divided highway.

### **CULVERTS**

#### **BOXCULHT – BOX CULVERT HEIGHT**

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|------------------------------------|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A                 | N/A                |
|      |      |                                | roads, including managed lanes     |                     |                    |

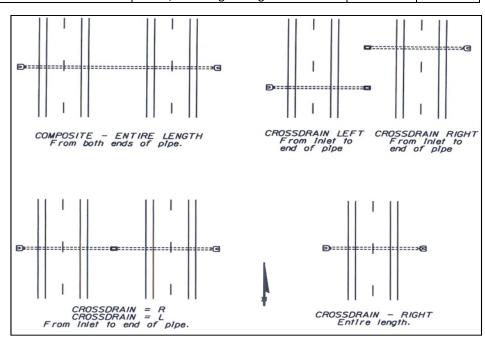
#### Offset Rules:

**Code C** – when pipe is across the entire roadway.

**Code R** – when pipe is across the right side of a divided highway only.

**Code L** – when pipe is across the left side of a divided highway only.

**Code R and code L** – will be used when the crossdrain pipe is connected in the median by an inlet.



**How to Gather this Data:** Enter the box height to the nearest foot.

**Dimensional Accuracy:** 1 foot

Value for Box Culvert Height: 3 Bytes: XX.X

### PHYSICAL FEATURES - FEATURE 241 - CROSSDRAINS

### **BOXCULLT - BOX CULVERT WIDTH**

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|------------------------------------|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A                 | N/A                |
|      |      |                                | roads, including managed lanes     |                     |                    |

**How to Gather this Data:** Enter the box width to the nearest foot.

**Dimensional Accuracy:** 1 foot

Value for Box Culvert Width: 3 Bytes: XX.X

### **BXCULGTH - BOX CULVERT LENGTH**

| HPMS | MIRE | Who/What uses this Information | Required For  | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|---|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive roads, including managed lanes | N/A                 | N/A                |

**How to Gather this Data:** Measure the box length, from outside headwall to outside headwall. Enter the box length to the nearest two feet.

Dimensional Accuracy: 2 feet

Value for Box Culvert Length: 3 Bytes: XXX

## **NOBXCULV – NUMBER OF BOX CULVERTS**

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|------------------------------------|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A                 | N/A                |
|      |      |                                | roads, including managed lanes     |                     |                    |

**How to Gather this Data:** Enter the number of box culverts. Box culverts have a sum of openings less than 20 feet, such as one box culvert has three openings and each are 6' then 6'+6'+6'=18'. If the sum total of the openings are greater than 20 feet then it is considered a bridge, it should have a bridge number assigned shown on the structure, and should be on the SLD. It is captured under Feature 258 Structures. Always check with the Bridge Department to be sure.

Value for Number of Box Culverts: 2 Bytes: XX





Multiple cells

## PHYSICAL FEATURES - FEATURE 241 - CROSSDRAINS

## **CROSSDRAINS**

## **CRSDRLGH - LENGTH OF CROSSDRAIN PIPES**

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset    | Offset   |
|------|------|--------------------------------|------------------------------------|-----------|----------|
|      |      |                                |                                    | Direction | Distance |
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A       | N/A      |
|      |      |                                | roads, including managed lanes     |           |          |

**How to Gather this Data:** Measure the crossdrain length, from outside headwall to outside headwall. Enter the length of the crossdrain to the nearest two feet.

Dimensional Accuracy: 2 feet

Value for Length of Crossdrain Pipes: 3 Bytes: XXX

## **NOCRDRAN - NUMBER OF CROSSDRAIN PIPES**

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|------------------------------------|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A                 | N/A                |
|      |      |                                | roads, including managed lanes     |                     |                    |

How to Gather this Data: Enter the number of crossdrains.

Value for Number of Crossdrain Pipes: 2 Bytes: XX



Non-circular



Circular



Circular

### PHYSICAL FEATURES - FEATURE 241 - CROSSDRAINS

## **PIPES**

### PIPETYPE - TYPE OF PIPE

| HPMS | MIRE | Who/What uses this Information | Required For  | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|---|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive roads, including managed lanes | N/A                 | N/A                |

How to Gather this Data: Enter the type of material from which the pipe is constructed. Effective 2017

| Codes | Descriptions     |    | Descriptions               |
|-------|------------------|----|----------------------------|
| 01    | Corrugated Metal | 03 | Cast Iron                  |
| 02    | Concrete         | 04 | PVC (Effective April 2017) |

## **PIPEDIAM - PIPE DIAMETER**

| HPMS | MIRE | Who/What uses this Information | Required For  | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|---|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive roads, including managed lanes | N/A                 | N/A                |

**How to Gather this Data:** Enter the circular pipe diameter in inches.

Value for Pipe Diameter: 3 Bytes: XXX

## PIPEHIGH - NON-CIRCULAR PIPE HEIGHT

| HPMS | MIRE | Who/What uses this Information | Required For                       | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|------------------------------------|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive | N/A                 | N/A                |
|      |      |                                | roads, including managed lanes     |                     |                    |

**How to Gather this Data:** Enter the non-circular pipe height in inches.

Value for Non-Circular Pipe Height: 3 Bytes: XXX

## PIPEWDTH - NON-CIRCULAR PIPE WIDTH

| HPMS | MIRE | Who/What uses this Information | Required For  | Offset<br>Direction | Offset<br>Distance |
|------|------|--------------------------------|---|---------------------|--------------------|
| N/A  | N/A  | Maintenance                    | All Active On and Active Exclusive roads, including managed lanes | N/A                 | N/A                |

How to Gather this Data: Enter the non-circular pipe width in inches.

Value for Non-Circular Pipe Width: 3 Bytes: XXX